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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/723,133

11/25/2003

Eric A. Jacobsen

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EXAMINER

TORRES, JOSEPH D

ART UNIT

PAPER NUMBER

2112

MAIL DATE

DELIVERY MODE

04/03/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Advisory Action</b> <b>Before the Filing of an Appeal Brief</b>	<b>Application No.</b> 10/723,133	<b>Applicant(s)</b> JACOBSEN ET AL.	
	<b>Examiner</b> Joseph D. Torres	<b>Art Unit</b> 2112	

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 30 March 2009 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.  
 b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

#### AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
 (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
 (b) ☐ They raise the issue of new matter (see NOTE below);  
 (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
 (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
 5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
 6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
 7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
 The status of the claim(s) is (or will be) as follows:  
 Claim(s) allowed: \_\_\_\_\_.  
 Claim(s) objected to: \_\_\_\_\_.  
 Claim(s) rejected: 1 and 3-9.  
 Claim(s) withdrawn from consideration: 10-41.

#### AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
 9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
 10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

#### REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.  
 12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_.  
 13. ☐ Other: \_\_\_\_\_.

/Joseph D Torres/  
 Primary Examiner, Art Unit 2112

Continuation of 11. does NOT place the application in condition for allowance because: The Applicant contends, "In addition to the admitted features that Nieminen fails to disclose, Nieminen fails to disclose, teach or suggest at least the features of setting the recited code rates "such that a similar codeword error probability is achieved for each codeword considering available decoding time for decoding a last codeword will be less than available decoding time for decoding a first codeword," as recited in claim 1".

The Examiner disagrees and asserts that for a block code decoded over a trellis, such as a turbo block code, a shorter code results in a shorter decoding time since decoding time is directly proportional to trellis length and trellis length is directly proportional to the block code length. Selecting a shorter block code is equivalent to decreasing decoding time. That is, there is no distinguishable difference in selecting a shorter block code and decreasing decoding time in a Trellis based code and selecting a shorter block code invokes a decreased decoding time. Code rates are set to achieve a particular error probability given a particular time/rate constraint. Since the decoder is part of the channel and impacts rate requirements of the channel, decoder timing is necessary for determining channel rate requirements. Finally, since the length of a decoding Trellis is determined by the length of the systematic user Data and since the last codeword has less user data, the Trellis for the last codeword is shorter and since codewords are decoded over the length of the trellis for the codeword, the decoding time for the last codeword will be less. Nieminen teaches setting code rates of the one or more codewords such that the last codeword has a lower code rate than the first codeword (code rate is defined as data length over codeword length NTB: since the data length of the last codeword is smaller than that of the previous codewords and since codeword length NTB is fixed, the code rate of the last codeword is lower), such that a similar codeword error probability (since each of the codewords is the same length, the bit error probability is the same for all codewords in spite of the different coding rates of the codewords, Note: Bit error rate/probability is the average number of errors in a fixed interval and hence does not vary over a fixed interval, hence; a similar codeword error probability is achieved for each codeword considering and in spite of available decoding time for decoding a last codeword will be less than available decoding time for decoding a first codeword) is achieved for each codeword considering available decoding time for decoding a last codeword will be less than available decoding time for decoding a first codeword (since each of the codewords is the same length, the bit error probability is the same for all codewords in spite of the different coding rates of the codewords, Note: Bit error rate/probability is the average number of errors in a fixed interval and hence does not vary over a fixed interval, hence; a similar codeword error probability is achieved for each codeword considering and in spite of available decoding time for decoding a last codeword will be less than available decoding time for decoding a first codeword)..

All arguments have been considered but are not persuasive.